



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/632,749

08/01/2003

Hiroyuki Azuma

NEC 03P101

4659

27667 7590 10/16/2008  
HAYES SOLOWAY P.C.  
3450 E. SUNRISE DRIVE, SUITE 140  
TUCSON, AZ 85718

EXAMINER

SOBUTKA, PHILIP

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

10/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/632,749	<b>Applicant(s)</b> AZUMA, HIROYUKI	
	<b>Examiner</b> PHILIP J. SOBUTKA	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 and 01 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Drawings***

1. The drawings are objected to because, as required by 37 CFR 1.84 (I), which addresses character of lines, numbers, and letters in drawings:

*All drawings must be made by a process which will give them satisfactory reproduction characteristics. Every line, number, and letter must be durable, clean, black (except for color drawings), sufficiently dense and dark, and uniformly thick and well-defined. The weight of all lines and letters must be heavy enough to permit adequate reproduction. This requirement applies to all lines however fine, to shading, and to lines representing cut surfaces in sectional views. Lines and strokes of different thicknesses may be used in the same drawing where different thicknesses have a different meaning.*

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the lines and lettering in the figures are not “clean” and “uniformly thick and well-defined”. Note that the images of the drawings present in the application appear fuzzy, as if they were from bad photocopy or fax. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 20-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Simpson et al (US 5,404,580).

Claim 20. Simpson teaches an external module (smart card) for installation into a mobile communication terminal (Abstract, column 4 lines 49-52), said external module comprising:

a test program execution unit, for testing a communication protocol (Column 1 lines 16-30, column 2 lines 65- 68, column 3 lines 1-4), including

a collection mechanism (the internal control logic attached to the keypad interface) for communicating with said mobile communication terminal to collect information from said mobile terminal relating to an internal state of said mobile communication terminal during execution of a communication protocol sequence (Column 6 lines 48-68, column 7 lines 1-2), and

a storage mechanism for storing therein information that has been collected by said collection mechanism (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

As to claim 21, Simpson teaches an external module according to claim 20, further comprising: protocol execution mechanism for requesting said mobile

communication terminal to execute a communication protocol sequence (Column 4 lines 53-56, where Simpson et al. describe a registration request).

As to claim 22, Simpson teaches an external module according to claim 21, wherein said protocol execution mechanism includes a mechanism for requesting the execution of said communication protocol sequence based on information that has been stored in said storage mechanism (Column 4 lines 53-56, where Simpson et al. disclose a subscriber validation code).

As to claim 23, Simpson teaches an external module according to claim 21, wherein said communication protocol sequence is a communication protocol sequence that is performed by radio between a mobile communication terminal and a base station (Column 4 lines 53-56).

As to claim 24, Simpson teaches an external module according to claim 20, further comprising stored information processing mechanism (microprocessor) for processing information that has been stored in said storage mechanism (Column 4 lines 53-56).

As to claim 25, Simpson teaches an external module according to claim 24, wherein said protocol execution mechanism includes a mechanism for requesting the execution of a communication protocol sequence (registration) based on information that has been processed by said stored information processing mechanism (Column 4 lines 53-56).

As to claim 26, Simpson teaches an external module according to claim 20, wherein said external module is any one of a SIM card, a USIM card, and an IC card

having higher specifications than a SIM card or USIM card (abstract, column 2, lines 28-36).

Consider claim 27. Simpson teaches a mobile communication terminal into which an external module is installed (Abstract, column 4 lines 49-52), said mobile communication terminal comprising:

an acquisition mechanism (the internal control logic) for acquiring information, in response to commands from said external module (the removable card, see figure 3, items 133,132, column 1, lines 28-65, column 5, lines 5-37), from said mobile terminal relating to an internal state of said mobile communication terminal during execution of a communication protocol sequence (Column 6 lines 48-68, column 7 lines 1-2) and

an output mechanism for supplying information that has been acquired by said acquisition mechanism to said external module where the information is stored (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122).

Consider claim 28. Simpson teaches a mobile communication system comprising:

a mobile communication terminal (abstract); and

an external module for installation into said mobile communication terminal (Abstract, column 4 lines 49-52);

wherein said mobile communication terminal comprises:

an acquisition mechanism (the internal control logic) for acquiring information, in response to commands from said external module (the removable card, see figure 3, items 133,132, column 1, lines 28-65, column 5, lines 5-37), from said mobile terminal relating to an internal state of said mobile communication terminal during execution of a communication protocol sequence (Column 6 lines 48-68, column 7 lines 1-2) and

an output mechanism (the internal control logic attached to the keypad and microprocessor) for supplying information that has been acquired by said acquisition mechanism to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122);

and wherein said external module comprises:

a collection mechanism for collecting information from said mobile terminal that has been supplied by said output mechanism of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2); and

a storage mechanism for storing therein information that has been collected by said collection mechanism (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

Consider claim 29. Simpson teaches a method for testing communication protocol in a mobile communication terminal (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4), an external module being installed into said mobile communication terminal (Abstract, column 4 lines 49-52), said method comprising the steps of:

requesting said mobile communication terminal, by said external module, to execute a communication protocol sequence (Column 4 lines 53-56, where Simpson et al. describe a registration request);

executing, by said mobile communication terminal, said communication protocol sequence in accordance with said request by said external module (Column 4 lines 56-57, where Simpson et al. disclose a registered subscriber);

an internal acquisition mechanism (the internal control logic) for acquiring information, in response to commands from said external module (the removable card, see figure 3, items 133, 132, column 1, lines 28-65, column 5, lines 5-37), from said mobile terminal relating to an internal state of said mobile communication terminal during execution of a communication protocol sequence (Column 6 lines 48-68, column 7 lines 1-2) and

supplying, by said mobile communication terminal, the acquired information to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122);

collecting, by said external module, information that has been supplied by said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2); and

storing, in said external module, the collected information (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

As to claim 30, Simpson teaches a method according to claim 29, wherein said step of requesting to execute said communication protocol sequence includes requesting, by said external module to execute said communication protocol sequence



based on information that is stored (Column 4 lines 53-56, where Simpson et al. disclose a subscriber validation code).

As to claim 31, Simpson teaches an method according to claim 29, wherein said step of executing said communication protocol sequence includes execution by said mobile communication terminal of a communication protocol sequence by radio with a base station (Column 4 lines 53-56).

As to claim 32, Simpson teaches a method according to claim 29, further comprising a step of processing information that is stored in said external module (Column 4 lines 49-56).

As to claim 33, Simpson teaches an method according to claim 32, wherein said step of executing said communication protocol sequence includes requesting, by said external module, execution of a communication protocol sequence based on information that has been processed (Column 4 lines 53-57).

As to claim 34, Simpson teaches an method according to claim 29, wherein said external module is any one of a SIM card, a USIM card, and an IC card having higher specifications than a SIM card or a USIM card (abstract, column 2, lines 28-36).

5. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al (US 5,404,580) in view of Rimpela et al (US 6,697,604).

Consider claim 35, Simpson et al. disclose an external module for installation in a mobile communication terminal (Abstract, column 4 lines 49-52), said external module comprising;

a program execution unit (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4, where Simpson et al. disclose enhancing a service card);

a collection mechanism for communicating with said mobile communication terminal to collect information from said mobile terminal relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2) and

a storage mechanism for storing therein information that has been collected by said collection mechanism (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

However, Simpson et al. do not disclose collecting during execution of test programs on said test program execution unit. Rimpela et al. disclose collecting during execution of test programs on said test program execution unit (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line 12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to collect information during execution of test programs on the test program execution unit, as taught by Rimpela et al., in the method of Simpson et al. for the purpose of determining and controlling delays, data to be transmitted and desired functions of the mobile station (as suggested by Rimpela et al. in column 5 lines 33-45).

Consider claim 36, Simpson et al. disclose a mobile communication terminal in which an external module for executing test programs is installed (Abstract, column 4 lines 49-52), said mobile terminal comprising:

an acquisition mechanism (the internal control logic) for acquiring information, in response to commands from said external module (the removable card, see figure 3, items 133,132, column 1, lines 28-65, column 5, lines 5-37), from said mobile terminal relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation i.e. information relating to the internal state); and

an output mechanism for supplying information that has been acquired by said acquisition mechanism to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122).

However, Simpson et al. do not specifically disclose acquiring during said test programs. Rimpela et al. disclose acquiring information during the test programs (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line 12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to acquire information during the test programs, as taught by Rimpela et al., in the method of Simpson et al. for the purpose of determining and controlling delays, data to be transmitted and desired functions of the mobile station (as suggested by Rimpela et al. in column 5 lines 33-45).

Art Unit: 2618

Consider claim 37, Simpson et al. disclose a mobile communication system comprising

a mobile communication terminal; and

an external module for installation in said mobile communication terminal

(Abstract, column 4 lines 49-52);

wherein said mobile communication terminal comprises:

an acquisition mechanism for acquiring information, in response to commands from said external module (the removable card, see figure 3, items 133,132, column 1, lines 28-65, column 5, lines 5-37), from said mobile terminal relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation i.e. information relating to the internal state); and

an output mechanism for supplying information that has been acquired by said acquisition mechanism to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122);

and wherein said external module comprises:

a program execution unit for performing programs (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4);

a collection mechanism for collecting information from said mobile terminal that has been supplied by said output mechanism of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2); and

a storage mechanism for storing therein information that has been collected by said collection means (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

However, Simpson et al. do not specifically disclose collecting information for test programs on said program execution unit. Rimpela et al. disclose collecting information for test programs on said test program execution unit (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line 12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to collecting information for test programs, as taught by Rimpela et al., in the method of Simpson et al. for the purpose of determining and controlling delays, data to be transmitted and desired functions of the mobile station (as suggested by Rimpela et al. in column 5 lines 33-45).

Consider claim 38, Simpson et al. disclose a method for communication by executing programs in a mobile communication terminal (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4), an external module being installed in said mobile communication terminal (Abstract, column 4 lines 49-52), said method comprising steps of:

requesting said mobile communication terminal, by said external module, to execute a communication protocol sequence (Column 4 lines 53- 57);

executing, by said mobile communication terminal, said communication protocol sequence in accordance with said request by said external module (Column 4 lines 53- 57);

acquiring, in response to commands from said external module (the removable card, see figure 3, items 133,132, column 1, lines 28-65, column 5, lines 5-37), from said mobile communication terminal, information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating to the internal state));

supplying, by said mobile communication terminal, the acquired information to said external module (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating to the internal state) and this information is stored on the SIM card);

collecting, by said external module, information that has been supplied by said mobile communication terminal as part of said program (Column 6 lines 48-68, column 7 lines 1-2); and

storing, in said external module, the collected information from said program (Column 6 lines 48- 68, column 7 lines 1-2, figure 3 element 132).

However, Simpson et al. do not specifically disclose collecting information for test programs. Rimpela et al. disclose collecting information for test programs (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line 12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to collect information for test programs, as taught by Rimpela et al., in the method of Simpson et al. for the purpose of determining and controlling delays, data to be transmitted and

desired functions of the mobile station (as suggested by Rimpela et al in column 5, lines 33-45).

### **Response to Amendment**

6. Applicant's arguments filed March 31, 2008 have been fully considered but they are not persuasive.

Applicant argues that Simpson does not teach a test program execution unit for testing the communication protocol. However as noted in the above rejection Simpson on column 1, lines 16-30, 'clearly teaches

"On insertion of the service card into the radiotelephone, the radiotelephone enters a service mode, and test programs are executed. During a service mode the operation of the radiotelephone is tested. For example, range information is tested, the memory is read and/or a test call is performed whereby a service number is called which connects the radiotelephone to a local base station, in response to which the base station transmits a tone signal back to the radiotelephone. "

Clearly the above is a testing program for at least some of the parameters of the communication protocol. Note that the above would also necessarily test internal state of the device.

Applicant argues that Simpson does not teach testing of communication between two units, however, the testing described above in column 1, relating to communication to the base station corresponds to the argued testing during communication.

Applicant also argues that Simpson does not teach the acquisition of internal information in response to commands from the external unit. However, as now noted above, Simpson clearly teaches that the internal state is set based on setting in the external SIM card. Note that a setting in the card would correspond to the claimed command, since it would set an operating function of the device.

### ***Conclusion***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. SOBUTKA whose telephone number is (571)272-7887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.
9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177/4177.
10. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

**CENTRALIZED DELIVERY POLICY:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the



Art Unit: 2618

examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip J Sobutka/  
Primary Examiner, Art Unit 2618

(571) 272-7887